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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION

ORACLE AMERICA, INC.,

Plaintiff,

v.

GOOGLE INC.,

Defendant.

Case No. 3:10-cv-03561 WHA

**BRIEF IN SUPPORT OF GOOGLE'S
MOTION FOR JUDGMENT AS A MATTER
OF LAW ON COUNTS V AND VII OF
ORACLE'S AMENDED COMPLAINT**

Dept.: Courtroom 8, 19th Floor
Judge: Hon. William Alsup

I. INTRODUCTION

In accordance with Rule 50 of the Federal Rules of Civil Procedure, as previously set forth in open court on May 10, 2012 (RT 3707-3709), and as outlined on May 15, 2012 (Dkt. 1151) Google hereby files this brief in support of Google's motion for judgment as a matter of law on Counts V and VII of Oracle's Amended Complaint.

II. LEGAL STANDARDS

Judgment as a matter of law is proper when "a party has been fully heard on an issue and there is no legally sufficient evidentiary basis for a reasonable jury to find for that party on that issue." Fed. R. Civ. P. 50(a)(1). Rule 50 "allows the trial court to remove . . . issues from the jury's consideration when the facts are sufficiently clear that the law requires a particular result." *Weisgram v. Marley Co.*, 528 U.S. 440, 448 (2000) (internal quotations omitted). The standard for granting judgment as a matter of law, in practice, mirrors the standard for granting summary judgment, and "the inquiry under each is the same." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 250-51 (1986).

III. AS TO COUNT V OF ORACLE'S AMENDED COMPLAINT: GOOGLE IS ENTITLED TO JUDGMENT AS A MATTER OF LAW

To prove patent infringement, Oracle must show that Android devices meet "each and every" element of the asserted claims. *Star Scientific, Inc. v. R.J. Reynolds Tobacco Co.*, 655 F.3d 1364, 1378 (Fed. Cir. 2011). Oracle presented two theories of infringement based on (1) the Resolve.c code in the Dalvik virtual machine and (2) the dexopt tool. Oracle has not carried its burden to show that either of these Android features meets each and every element of any of the asserted claims. Google is therefore entitled to judgment as a matter of law that it has not infringed the '104 patent.

A. Because Dalvik bytecode instructions do not contain symbolic references, Google is entitled to judgment as a matter of law that it does not infringe any of the asserted claims of the '104 patent.

There is no evidence that either Resolve.c or the dexopt tool operate on "instructions containing one or more symbolic references," as required by asserted Claims 11, 27, 29, 39, 40,

1 and 41 of the '104 patent. The Court has construed the term “symbolic reference” to mean
 2 a reference that identifies data by a name other than the numeric memory location
 3 of the data, and that is resolved dynamically rather than statically

4 [Dkt. No. 137 at 22.] As Dr. Mitchell conceded, this construction makes a distinction between
 5 using names to represent data (i.e., symbolic references) and using numeric memory locations.
 6 [RT 3480:12-15 (Mitchell).] There is no limitation regarding the type of data being referenced.

7 It is undisputed, that each of the asserted claims of the '104 patent requires that there be a
 8 symbolic reference in the instructions themselves. Even Dr. Mitchell, Oracle's expert admits this.
 9 [RT 3477:6-12 (“Q. Because every claim that you’ve analyzed requires that the symbolic
 10 reference be in the instructions, right? A. The wording varies across the claims. Q. But,
 11 essentially, either contained in or in each one of the limitations requires that there be a symbolic
 12 reference in the instructions themselves, right? A. Yes.”); RT 3487:13-16 (“But you would agree
 13 with me that whether you’re talking about Resolve.c or dexopt, you’ve got to find a symbolic
 14 reference in the instructions? A. Yes.”).] The requirement is also clear from the plain language
 15 of the claims. See TX 4015 at col. 13 (claim 11 reciting “instructions containing one or more
 16 symbolic references”), at col. 14 (claims 27 and 29 reciting “symbolic data references in the set of
 17 original instructions”), at col. 15 (claims 39-41 reciting “instruction contains a symbolic field
 18 reference.”). Thus, to prove infringement, Oracle bore the burden of showing that Resolve.c and
 19 the dexopt tool operate on instructions that contain “a reference that identifies data by a name
 20 other than the numeric memory location of the data.”

21 Because Dalvik bytecode instructions—the instructions evaluated by both Resolve.c and
 22 the dexopt tool—contain references to numeric memory locations of data, they cannot satisfy all
 23 of the limitations of the asserted claims. Dalvik bytecode instructions consist of an opcode and
 24 operand. [TX 737 (“Each instruction starts with the named opcode and is optionally followed by
 25 one or more arguments.”); RT 3590:23-3591:25 (Bornstein); RT 3844:14-3855:12, 3925:4-18
 26 (August).] In Android, the accused operands are indexes that take the form “field@CCCC” and
 27 reference locations in tables. [See TX 46.106; TX 735 (“There are separately enumerated and
 28 indexed constant pools for references to strings, types, fields, and methods.”); TX 737; RT

1 3732:15-19, 3736:16-23, 3755:8-9, 3765:9-12 (McFadden); 3858:5-12, 3858:21-359:11, 3918:13-
 2 23, 3923:20-24, 3925:19-3926-9 (August).] Dr. Mitchell agrees. [RT 3488:6-8, 3488:19-23,
 3 3489:10-12 (Dr. Mitchell) (the “classIdx” index in Dalvik instructions provides information “to a
 4 location in another table”); RT 3496:12-3497:6 (Dr. Mitchell) (the “field Idx” in Dalvik
 5 instructions is “an index to a specific location in the field table”).] Applying the Court’s claim
 6 construction, these indexes do not qualify as symbolic references.

7 As Dr. Mitchell confirmed via testimony, his report refers to indexes as numeric rather
 8 than symbolic references. [RT 3490:7-10, 3528:9-22, 3529:1-10, 4037:9-4038:3, 4038:10-
 9 4039:11, 4039:14-4040:9 (Mitchell).] This is not surprising in light of the fact that indexes point
 10 to locations in tables. To try to circumvent his prior statements, Dr. Mitchell has conjured up a
 11 re-interpretation of the term “symbolic reference” that does not conform with the Court’s
 12 construction. Specifically, Dr. Mitchell bases his opinion on a meta claim construction argument
 13 about what “data” means in the context of the Court’s construction:

14 As far as I can tell, the only contested issue here is whether the field indexes and
 15 instructions are symbolic references or not. *And that in the end just seems to turn*
 16 *on what we mean by data*, according to the last bit of testimony from Professor
 August.

17 [RT 4019:3-7 (Mitchell) (emphasis added).] Dr. Mitchell explains that his opinion is based on the
 18 theory that “data” in the Court’s construction is something much more restrictive than what the
 19 ordinary meaning of the word “data” implies. According to Dr. Mitchell, the “data” must be the
 20 actual field data in the instance object, as opposed to any data in the .dex file, including the data
 21 in the constant pool tables. [RT 4025:6-21 (Mitchell) (“So in order for that to happen, we have to
 22 find where that actual data is in the object using this symbolic reference. . . .”).] In other words,
 23 to turn an index, which is a numeric reference to a location in a table, into a symbolic reference,
 24 Dr. Mitchell has re-defined “symbolic reference” to mean “a reference that identifies *the actual*
 25 *field data in the instance object* by a name other than the numeric memory location of the *actual*
 26 *field data in the instance object*” (emphasis indicating Dr. Mitchell’s apparent changes to Court’s
 27 construction).

28 Oracle’s overly-restrictive, re-definition of the term “data” was again highlighted in

1 closing arguments when Mr. Jacobs argued:

2 Now, there was another potential source of confusion which we clarified also
3 through Dr. August and through Professor Mitchell. What's the data that this
4 claim is talking about? Is it talking about what Google wanted to focus on, which
5 is the constant pool information (indicating), or is it talking about the data in the
6 data object, the actual field value, the actual data?

7 . . .

8 So the whole goal of this exercise is to obtain meaningful data, the actual data. . . .

9 . . .

10 Now, Mr. Van Nest agreed that the distinction between this is at least the
11 distinction between meaningful data and unmeaningful data. We're relying on
12 meaningful data. Google is relying on unmeaningful data.

13 [RT 4111:5-11, 4200:7-10 (Jacobs).] This simply does not conform to the Court's ruling on
14 claim construction, which simply distinguishes between a reference to data—any data—by a
15 name rather than location. *See* Claim Construction Order (Dkt. No. 137) at 20-22.

16 Oracle never requested clarification of the meaning of the term “data” during the
17 *Markman* process. It also declined the Court's offer to seek additional claim constructions in
18 December 2011, months after Dr. Mitchell changed his opinion in response to Dr. August's
19 report. [Dkt. Nos. 603, 637.] Most relevant to this motion, neither Dr. Mitchell nor any other
20 evidence offered by Oracle suggested that “data” is a term of art that is understood by those
21 skilled in the art to correspond to or encompass only “actual field data in the instance object.” In
22 fact, there is no such suggestion anywhere in the record. Accordingly, no reasonable jury could
23 conclude, based on the evidence and expert testimony, that there is a basis for such a meaning.

24 As is clear on its face, the Court's construction of “symbolic reference” does not
25 incorporate the restrictive meaning of “data” advanced by Oracle and Dr. Mitchell. *See* Claim
26 Construction Order (Dkt. No. 137) at 20-22. As such, Dr. Mitchell's testimony cannot be
27 credited. [RT 4206:18-21 (Court) (“If a witness has based his view on meanings of the terms
28 contrary to my stated definitions, you should discount that part of his testimony accordingly.”).]

Without Dr. Mitchell's testimony, Oracle cannot prove that Dalvik bytecode instructions

1 contain symbolic references, which each of the asserted claims requires. To the contrary, the
 2 wealth of evidence presented at trial confirms that Dalvik bytecode instructions contain only
 3 numeric references in the form of indexes to locations in memory where constant pool data is
 4 stored in the dex files. [See TX 46.106; TX 735 (“There are separately enumerated and indexed
 5 constant pools for references to strings, types, fields, and methods.”); TX 737; RT 3732:15-19,
 6 3736:16-23, 3755:8-9, 3765:9-12 (McFadden); 3858:5-12, 3858:21-359:11, 3918:13-23, 3923:20-
 7 24, 3925:19-3926-9 (August).] Thus, no reasonable jury could conclude that either the Resolve.c
 8 code or the dexopt tool in Android infringe the asserted claims of the ‘104 patent.

9 **B. Google is also entitled to judgment as a matter of law that the dexopt**
 10 **functionality does not infringe Claims 27 and 29 of the ‘104 patent because**
 11 **dexopt resolves symbolic references statically rather than dynamically.**

12 Android’s dexopt functionality performs static—not dynamic—optimizations.¹ The
 13 Court’s claim construction requires that symbolic references be “resolved dynamically rather than
 14 statically.” In light of that requirement, there is no dispute that if dexopt performs functions
 15 statically, then dexopt doesn’t infringe. [RT 3509:16-18 (Mitchell).] Dr. Mitchell’s infringement
 16 opinion at trial was that dexopt is a dynamic process because it relies on information about the
 17 runtime environment and that is available at runtime. [RT 4028:14-25 (Mitchell).] But Dr.
 18 Mitchell’s conclusory statements do not provide an adequate basis for a reasonable jury to reach a
 19 verdict of literal patent infringement. Indeed, there is no evidence to support Dr. Mitchell’s
 20 opinion that an optimization (e.g., resolution) based on information about a runtime environment
 21 is “dynamic” and not “static.” To the contrary, there is a wealth of documentary evidence, fact
 22 testimony, and expert testimony that directly contradicts Dr. Mitchell’s opinion. [RT 3730:16-22
 23 (McFadden); RT 3940:17-20 (August); RT 3595:21-24 (Bornstein); TX 32 at 35, TX 816 at
 24 24:05; TX 735 (defining opcodes that “are reasonable candidates for static linking”); TX 737
 25 (defining “statically linked” instruction formats); TX 739 (dexopt performs optimizations that
 26 “can be inferred statically”).] Accordingly, no reasonable jury could conclude that the dexopt
 27 tool infringes claims 27 and 29 of the ‘104 patent.

28 ¹ Only claims 27 and 29 are asserted against dexopt.

C. There is no legal basis for the jury to conclude that Android infringes the '104 patent where Oracle only presented a literal infringement theory.

To the extent Oracle now contends that certain claim elements are effectively present in Android under the doctrine of equivalents, Google is entitled to a judgment as a matter of law. First, having failed to disclose such a theory in its Rule 3-1 Patent Disclosures under the Patent Local Rules, Oracle may not now assert an infringement theory under the doctrine of equivalents. Second, even if Oracle were not barred from asserting such a theory, Dr. Mitchell's testimony would not support a conclusion of infringement under the doctrine of equivalents. The record contains no evidence that the accused Dalvik bytecode instructions, which contain symbolic references not in the instructions themselves but in a shared constant pool reached (directly or indirectly) via various tables, are substantially similar to instructions that literally contain symbolic references. *See TIP Sys., LLC v. Phillips & Brooks/Gladwin, Inc.*, 529 F.3d 1364, 1376-77 (Fed. Cir. 2008) (infringement under doctrine of equivalents may only be found where the accused device contains an "insubstantial" change from the claimed invention or where the accused device functions in substantially the same way as the claimed invention) (citing *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 339 U.S. 605, 610 (1950)). Here, Dr. Mitchell has testified that strings are stored in the string data table of the dex file. [RT 3290:2-3291:18 (Mitchell).] These strings, which are the names of the fields, classes, methods, and strings used in a program, are not stored in the Dalvik bytecode instructions themselves. The Resolve.c code and the dexopt tool use a series of numeric references (indexes) to eventually obtain a symbolic reference (name) from the string data table, and then resolve that name to find a numeric reference corresponding to that symbolic reference. In contrast, the asserted claims of the '104 patent require resolving a symbolic reference contained *in the instruction*; they do not have to follow a series of numeric references to obtain the symbolic reference (name). The way in which symbolic resolution is performed in Resolve.c and dexopt is advantageous compared to the process disclosed in the '104 patent in that it allows the Dalvik VM to operate with fixed-width instructions, which make processing virtual machine instructions easier. [RT 3592:4-3593:4 (Bornstein), 3263:7-3264:8 (McFadden), 3878:3-3879:9 (August).]

1 **III. AS TO COUNT VII OF ORACLE’S AMENDED COMPLAINT: GOOGLE IS**
 2 **ENTITLED TO JUDGMENT OF NON-INFRINGEMENT OF THE ‘520 PATENT**
 3 **AS A MATTER OF LAW**

4 To prove patent infringement, Oracle must show that the accused functionality meets
 5 “each and every” element of an asserted claim. *Star Scientific*, 655 F.3d at 1378. Oracle has not
 6 carried that burden for either of the asserted claims of the ‘520 patent. In particular, Oracle has
 7 not shown that the code it accuses of infringement ever simulates execution to identify the static
 8 initialization of arrays because, as the undisputed evidence at trial showed, that is not how the dx
 9 tool works. The requirement that identification of the initialization of static arrays be performed
 10 through “simulating execution” is found in both asserted claims, Claim 1 and Claim 20. TX
 4011.

11 The dx tool does not simulate execution in order to identify the static initialization of an
 12 array. Instead of going through the steps required to produce output showing what the static array
 13 would look like if the Java byte code instructions were performed, the dx tool uses a *pattern-*
 14 *matching* algorithm to determine what the static array would look like when initialized. The
 15 pattern matcher (a method known as `parseNewarray` found in class `bytecodeArray`) looks for a
 16 repeating sequence of instructions used to initialize static arrays. [RT 3800:2-3801:3 (Parr).]
 17 Although the pattern matcher code is called by code in the class file `Simulator.java`, the pattern
 18 matcher itself does not simulate *execution* of the bytecode, e.g., by manipulating a stack. [RT
 19 3802:25-3804:1 (Parr).] Instead, it returns the operands associated with the appropriate
 20 instructions in the pattern. [RT 3343:3-16 (Mitchell).] Moreover, the pattern matcher code will
 21 not work properly when a useless instruction is injected into the Java bytecode. As would be
 22 expected, the dx tool, when confronted with revised code that breaks the pattern, returns the
 23 Dalvik byte code equivalents of the Java byte code that performs the steps required to statically
 24 initialize the array rather than an efficient instruction that initializes a static array. [RT 3808:18-
 25 3809:6; 3809:20-3810:3 (Parr).] A process using simulated execution would simulate the
 26 execution of each instruction, including the useless instruction, and the useless instruction would
 27 end up having no effect on the eventual result. [RT 3810:4-13 (Parr).]

28 To prevail on literal infringement of the ‘520 patent, Oracle needed to prove that the

1 pattern matching code used in Android literally simulates execution, as required by the asserted
2 claims. Dr. Mitchell’s infringement opinion at trial was that the “simulation” (not “simulating
3 execution”) carried out by the `parseNewarray` method fell within the claims. [RT 4032:7-22
4 (Mitchell).] But a conclusory statement equating pattern matching to simulation (and not even
5 “simulating execution”) does not provide an adequate basis for a reasonable jury to reach a
6 verdict of literal patent infringement.

7 The `dx` tool source code confirms the absence of any literal correspondence between the
8 “simulating execution” claim limitation and the pattern matching code. Dr. Mitchell testified that
9 the identification of the static initialization of the array was performed by the `parseNewarray`
10 code, and agreed that code was distinct from the `Simulator.java` class. [RT 3343:3-16; 4061:21-
11 4062:3 (Mitchell).] Both Mr. Bornstein and Dr. Parr testified that the `dx` tool includes code that
12 actually performs simulated execution by manipulating a stack; however, the simulated execution
13 is not used for identifying the initialization of arrays. [RT 3589:11-17; 3589:25-3590:6; 3611:22-
14 3612:10 (Bornstein); RT 3798:2-8; 3798:22-3799:3 (Parr); TX 46.16, 46.17.] The presence of the
15 word “simulates” in code comments thus do not show that the `dx` tool simulates execution for
16 purposes of identifying the static initialization of an array; instead, simulated execution in the `dx`
17 tool is used only *for reasons other than identifying the initialization of static arrays*. [RT
18 3611:22-3612:10 (Bornstein); 3798:3-8 (Parr).] And it is undisputed that the ‘520 patent does not
19 include *any* mention of simulating execution through the use of pattern matching. [TX 4011; RT
20 3521:10-19 (Mitchell).]

21 Oracle never requested a construction of the phrase “simulating execution” during the
22 *Markman* process, taking the position that it should be construed in accordance with its “plain
23 meaning.” [See Dkt. No. 91 (parties’ joint claim construction and prehearing statement).] Oracle
24 did not suggest that simulating execution is a term of art that is understood by those skilled in the
25 art to correspond to or encompass pattern matching. No reasonable jury could conclude, based on
26 the evidence and expert testimony, that there is a basis for such a construction of simulating
27 execution, nor that there is an understanding in the field of computer science as to either of these
28 terms that supports an assertion that pattern matching is literally simulating execution. Such a

1 construction was never sought by Oracle, even after the Court permitted the parties to seek
2 additional claim constructions earlier this year. [Dkt. Nos. 603, 637.] Because of Oracle’s failure
3 of proof and its inability to construe its claims to cover pattern matching, there is no basis for a
4 finding of literal infringement of the ‘520 patent by the Android dx tool. The fact that the
5 Android code actually does perform simulated execution for some functions is irrelevant—the
6 key issue, as proven by the record, is that the dx tool does not simulate execution for *the purpose*
7 of identifying the initialization of static arrays.

8 Oracle’s position, as articulated by Dr. Mitchell, depends on an implied theory of
9 equivalent infringement, that “pattern matching” achieves a *result similar to that of simulated*
10 *execution*—i.e., identifying the initialization of a static array without actual execution of the byte
11 code. [RT 4032:11-22 (Mitchell)] But even assuming, without conceding, that the two different
12 processes provide similar results, that is not a basis for a finding of infringement. To begin with,
13 Oracle may not assert an infringement theory under the doctrine of equivalents, having failed to
14 disclose such a theory in its Rule 3-1 Patent Disclosures under the Patent Local Rules. But even if
15 Oracle were not barred from asserting a belated theory of infringement under the doctrine of
16 equivalents, Dr. Mitchell’s testimony would not support a conclusion of infringement under the
17 doctrine of equivalents because the recited claim limitation of “simulating execution” does not
18 work in a way substantially similar to the accused pattern matching mechanism. *See TIP Sys.,*
19 *LLC v. Phillips & Brooks/Gladwin, Inc.*, 529 F.3d 1364, 1376-77 (Fed. Cir. 2008) (infringement
20 under doctrine of equivalents may only be found where the accused device contains an
21 “insubstantial” change from the claimed invention or where the accused device functions in
22 substantially the same way as the claimed invention) (citing *Graver Tank & Mfg. Co. v. Linde Air*
23 *Prods. Co.*, 339 U.S. 605, 610 (1950)). An argument based on a theory of infringement under the
24 doctrine of equivalents, not disclosed at the proper time, is also ripe for judgment as a matter of
25 law.

26 In order to support its literal infringement claims, Oracle needed to link up the accused
27 code with the claimed functionality and, if it could, with the other language it considered helpful.
28 Oracle could not do so. Unable to prove actual simulated execution, Oracle has tried to

1 reconstrue “simulating execution” to cover pattern matching with no legal basis to do so.

2 Therefore, no reasonable jury could find that the dx tool infringes the ‘520 Patent.

3 **IV. THE PATENT ACT DOES NOT DEFINE INFRINGEMENT TO INCLUDE**
 4 **MAKING A PRODUCT AVAILABLE FOR FREE.**

5 The evidence shows that Google does not charge a fee for Android source code. [RT
 6 3079:6-13 (Poore).] As such, Google cannot, as a legal matter, infringe under the applicable
 7 statutory language.

8 The Patent Act defines patent infringement to include only certain discrete acts: “Except
 9 as otherwise provided in this title, whoever without authority *makes, uses, offers to sell, or sells*
 10 any patented invention, within the United States, or *imports* into the United States any patented
 11 invention during the term of the patent therefore, infringes the patent.” 35 U.S.C. § 271(a)
 12 (emphases added). These terms take their well-known, ordinary meanings. *See NTP, Inc. v.*
 13 *Research in Motion, Ltd.*, 418 F.3d 1282, 1319 (Fed. Cir. 2005); *see also Med. Sol’ns, Inc. v. C*
 14 *Change Surgical LLC*, 541 F.3d 1136, 1141 (Fed. Cir. 2008); *Rotec Indus., Inc. v. Mitsubishi*
 15 *Corp.*, 215 F.3d 1246, 1255 (Fed. Cir. 2000). None of the categories covers the free distribution
 16 of source code via the Internet.

17 Labeling free distribution of a product as a “sale” would turn that term on its head. As the
 18 Federal Circuit has held, “[t]he definition of ‘sale’ is: ‘1. The transfer of property or title *for a*
 19 *price.*’” *NTP*, 418 F.3d at 1319 (quoting *Black’s Law Dictionary* 1337 (7th ed. 1999)) (emphasis
 20 added). And one of the “four elements” of a sale is “*a price* in money paid or promised.” *NTP*,
 21 418 F.3d at 1319 (quoting *Black’s Law Dictionary* 1337 (7th Cir. 1999)) (emphasis added).
 22 “Plainly, the common, or usual meaning of the term sale includes those situations in which a
 23 contract has been made between two parties who agree to transfer title and possession of specific
 24 property *for a price.*” *Enercon GmbH v. ITC*, 151 F.3d 1376, 1382 (Fed. Cir. 1998) (emphasis
 25 added).

26 By definition, distribution of a product for *free* does not constitute a transfer for *a price*.
 27 Thus, in a case involving patents for collecting and using newborn umbilical cord blood, the
 28 Federal Circuit found no “sale” where “[t]he defendants simply transferred the cord blood units to

1 designated transplanters upon direction from the families. Such a transaction does not constitute
 2 a ‘sale’ to a transplanter under any definition of the term ‘sale.’” *PharmaStem Therapeutics, Inc.*
 3 *v. Viacell, Inc.*, 491 F.3d 1342, 1359 (Fed. Cir. 2007). Similarly, district courts have concluded
 4 that distributing free samples does not qualify as a sale within the meaning of section 271(a). *See*
 5 *Cabot Corp. v. WGM Safety Corp.*, 562 F. Supp. 891, 892 (D. Mass. 1983).

6 If free distribution is not a sale, then offering to distribute something for free cannot be an
 7 offer for sale. *See Rotec*, 215 F.3d at 1255; *HollyAnne Corp. v. TFT, Inc.*, 199 F.3d 1304, 1309-
 8 10 (Fed. Cir. 1999). “If, as in this case, the offer included none of the hallmarks of a potential
 9 commercial transaction (i.e., a quotation of a price and a product description, or a communication
 10 that the item was available for purchase by the intended donee), it cannot be considered an offer
 11 for sale.” *HollyAnne*, 199 F.3d at 1310. Applied to the facts of this case, Google does not “offer”
 12 Android for sale. Rather, it places the Android source code on a website from which others can
 13 download it free of charge.

14 Oracle has also argued that Google “uses” Android within the meaning of the statute when
 15 it makes Android available for free download. That requires a strained reading of the term. “The
 16 ordinary meaning of ‘use’ is ‘to put into action or service.’” *Med. Sol’ns, Inc. v. C Change*
 17 *Surgical LLC*, 541 F.3d 1136, 1141 (Fed. Cir. 2008) (quoting *NTP*, 418 F.3d at 1317). The
 18 Federal Circuit has held that displaying a product and distributing brochures were not “uses”
 19 because neither act put the product into service. *See Med. Sol’ns*, 541 F.3d at 1141 (“Much more
 20 would be needed to qualify as an infringing use, including that the device was used to heat
 21 medical items at the show.”). And other courts have held that “using a device means using it to
 22 perform its actual function or service, not using it as a demonstrative display.” *Id.* at 1141 n.4
 23 (citing *Union Asbestos & Rubber Co. v. Evans Prods. Co.*, 328 F.2d 949, 951 (7th Cir. 1964);
 24 *Advanced Semiconductor Materials Am., Inc. v. Applied Materials, Inc.*, No. 93-20853, 1995 WL
 25 419747, at *6 (N.D. Cal. July 10, 1995)) (emphasis added). Simply making source code available
 26 on a website—whether for a price or for free—does not, under that definition, put the product into
 27 service. While stored on a network server and available via a website, the Android source code
 28 does not “perform its actual function or service.” *Id.* To do that, it must first be downloaded and

1 compiled by a developer. To adopt Oracle's contrary position would make the term "use" so
2 broad that it would render the other statutory terms superfluous.

3 In short, there is no evidence that Google performs any infringing acts. Judgment as a
4 matter of law is therefore appropriate.

5 **V. THE '104 PATENT IS INVALID FOR LATE BROADENING OF REISSUE**
6 **CLAIMS UNDER 35 U.S.C. § 251.**

7 The '104 patent is invalid for failure to comply with 35 U.S.C. § 251, which requires
8 broadening reissue applications to be filed within two years of the date the original patent issued.
9 There is no dispute that the claims of the '104 patent are broader than the claims of the patent
10 from which it reissued, U.S. Patent No. 5,367,685 ("the '685 patent"). *See* TX 4015 (reflecting
11 that reissued claims 11-41 are not limited to a hybrid-compiler-interpreter, unlike original claims
12 1-10, which require a compiler). Nor is there any dispute that the '104 patent resulted from a
13 continuing application that was filed more than two years after the '685 patent issued. *See id.* at
14 [22], [64] (reflecting Mar. 3, 1999 as filing date of '104 patent application, and Nov. 22, 1994 as
15 issue date of '685 patent). The patent statute requires that broadening reissue applications be
16 filed within two years of issuance of the original patent. 35 U.S.C. § 251. Although the U.S.
17 Court of Appeals for the Federal Circuit has recently concluded that broadening claims filed more
18 than two years after the issue date of the original patent may be valid if the reissue matures out of
19 a continuation of a timely-filed broadening application, *In re Staats*, 671 F.3d 1350, 1356 (Fed.
20 Cir. 2012), the Court essentially invited a petition for rehearing en banc. *Id.* at 1356. Google
21 believes that the case will be reheard and the decision will be reversed, requiring the invalidation
22 of the claims of the '104 patent under the plain terms of the statute. Google therefore moves for
23 judgment as a matter of law to preserve this issue for appeal.

24 Notably, while the claims of the '104 patent are narrower than those of the '685 patent
25 because they all include the limitation that symbolic references be contained in the instructions,
26 the claims of the '104 patent are also broader in that they eliminate the requirement of generating
27 executable code and compilation means. *See* TX 4015. Thus, though narrower in one respect,
28 the claims of the '104 patent have nevertheless been broadened for purposes of 35 U.S.C. § 251.

1 A claim of a reissue application is broader in scope than the original
 2 claims if it contains within its scope any conceivable apparatus or process which
 3 would not have infringed the original patent. A reissue claim that is broader in
 any respect is considered to be broader than the original claims *even though it*
may be narrower in other respects.

4 *See Tillotson, Ltd. v. Walbro Corp.*, 831 F.2d 1033, 1037 n.2 (Fed. Cir. 1987) (emphasis added).

5 For these reasons, Google is entitled to judgment as a matter of law that the claims of the
 6 '104 patent are invalid.

7 **VI. AS TO COUNTS V AND VII, GOOGLE IS ENTITLED TO JUDGMENT AS A**
 8 **MATTER OF LAW OF NO WILLFUL INFRINGEMENT**

9 It is undisputed that Google did not receive actual notice of the '104 patent or the '520
 10 patent—a prerequisite for a finding of willful infringement—until July 20, 2010, only twenty-
 11 three days before this lawsuit was filed on August 12, 2010. RT 3100:10-3101:2. *See In re*
 12 *Seagate Technology, LLC*, 497 F.3d 1360, 1371 (Fed. Cir. 2007); *see also Gustafson, Inc. v.*
 13 *Intersystems Industrial Prods., Inc.*, 897 F.2d 508, 511 (Fed. Cir. 1990) (“[A] party cannot be
 14 found to have ‘willfully’ infringed a patent of which the party had no knowledge.”).

15 To establish willful infringement, Oracle must first show by clear and convincing
 16 evidence that Google acted “despite an objectively high likelihood that its actions constituted
 17 infringement of a valid patent.” *Seagate*, 497 F.3d at 1371. Three weeks of total pre-suit
 18 exposure to and awareness of each of the original seven patents-in-suit is *per se* insufficient to
 19 support a finding of objective recklessness as required under *Seagate*. *See Finisar Corp. v.*
 20 *DirecTV Group, Inc.*, 523 F.3d 1323, 1339 (Fed. Cir. 2008) (finding no willful infringement even
 21 where accused infringer did not obtain opinion of counsel until *over one year* after it received a
 22 notice letter from patentee); *see also Gustafson*, 897 F.2d at 511 (“Nor is there a universal rule
 23 that to avoid willfulness one must cease manufacture of a product immediately upon learning of a
 24 patent, or upon receipt of a patentee’s charge of infringement, or upon the filing of suit.”).
 25 Objective recklessness cannot be established by any action taken by, or inaction by, Google
 26 during the three weeks following notice of seven complex patents.² Following actual notice of

27 ² As ordered by the Court on May 14, 2012, Oracle may not rely on any post-filing activity to
 28 prove willful patent infringement by Google:

1 the patents-in-suit, Google promptly studied the patents, investigated the merits of Oracle's patent
 2 infringement allegations and developed sound legal defenses to those allegations. *See, e.g.,*
 3 Answer to Plaintiff's Complaint (Dkt. No. 32); *see also Gustafson*, 897 F.2d at 511 ("Exercising
 4 due care, a party may continue to manufacture and may present what in good faith it believes to
 5 be a legitimate defense without risk of being found on that basis alone a willful infringer. That
 6 such a defense proves unsuccessful does not establish that infringement was willful.") (citation
 7 omitted).

8 No evidence at trial suggested that Google received actual notice of the '104 patent or the
 9 '520 patent at any point in time prior to July 20, 2010. [*See, e.g.,* RT 3771:20-:25 (Gupta Dep.
 10 Tr. (July 26, 2011) 133:2-:15, 239:9-:20) (explaining that Java-related patents never came up
 11 during the partnership negotiations between Google and Sun).] Oracle attempts to base Google's
 12 actual notice on a book co-authored by Tim Lindholm in 1997, which refers to U.S. Patent No.
 13 5,367,685 ("the '685 patent"), the original patent that eventually reissued as the '104 patent. TX
 14 25, TX 4015. This book alone is insufficient to establish that Google had actual notice of the
 15 '104 patent prior to July 20, 2010. First, the reference to the '685 patent in the book predates Mr.
 16 Lindholm's arrival at Google in 2005 by eight years [RT 3033:5-6] and his August 6, 2010 email
 17 to Andy Rubin and Ben Lee regarding a Java license by thirteen years. [TX 10.] Since joining
 18 Google, he has had no technical involvement with Android or Java. [RT 3033:5-3035:1.]
 19 Second, Mr. Lindholm testified that he was personally unfamiliar with the '685 patent and did not
 20 recall who included it in the book. [RT 3022:17-3023:13.] Indeed, in the second version of the
 21 book, published in 1999, the entire chapter referring to the '685 patent was removed. [TX 987.]
 22 Third, even if Mr. Lindholm had actual notice of the '685 patent, such notice is insufficient

24 Here is the answer. This is going to be a mess if we get into post complaint. So
 25 no post complaint. Period. We're going to go with the ordinary rule under
 26 *Seagate* and we will craft a sentence in the jury instruction that tells them not to
 27 speculate about events that occurred after the filing of the complaint and that the
 28 period for proving willfulness is up to the date of the complaint. . . . So the ruling
 is going to be, we measure things up to the date of the filing of the complaint.

[RT 3902:15-3903:17 (Court).]

1 grounds to infer that he also had actual notice of a subsequent reissue patent. *See Anascape, Ltd.*
 2 *V. Microsoft Corp.*, Civil Action No. 9:06-CV-158, 2008 WL 7182476, *2-3 (E.D. Tex. Apr. 25,
 3 2008) (finding pre-suit notice of parent patents to the patent-in-suit insufficient to establish actual
 4 notice of the patent-in-suit and therefore insufficient as a matter of law to establish willful
 5 infringement). Finally, as described in section V above, the claims of the '104 patent are very
 6 different from the claims of the '685 patent—being both broader and narrower in scope.

7 Furthermore, even assuming Google had some general awareness that Sun had a patent
 8 portfolio, general knowledge of a patent portfolio is insufficient to support a finding of that
 9 Google acted in an objectively reckless manner specifically with respect to the patents-in-suit in
 10 the years leading up to this lawsuit. This is particularly true in light of the fact that Oracle, and its
 11 predecessor Sun Microsystems, actively encouraged and promoted Google's development and
 12 release of the Android platform. [*See, e.g.*, TX 2352 (Sun CEO Jonathan Schwartz's official
 13 corporate blog post, dated Nov. 5, 2007, stating, "I just want to add my voice to the chorus of
 14 others from Sun in offering my heartfelt congratulations to Google on the announcement of their
 15 new Java/Linux phone platform, Android. Congratulations! . . . Google and the Open Handset
 16 Alliance just strapped another set of rockets to the community's momentum With friends
 17 like Google and Red Hat, it sure seems like the momentum behind Java's on the rise...");³ TX
 18 2939 (Larry Ellison's public statement at JavaOne 2009, "We're flattered by Android. We're
 19 flattered. Android is very exciting. Everyone should be flattered. I think we can see lots of Java
 20 devices. Some coming from our friends at Google."); TX 3103 (Eric Klein's public
 21 demonstration of Java FX running on Android at JavaOne 2008).] In light of these public
 22 statements, it is unsurprising—and entirely reasonable—for Google to have believed that it had
 23 no reason to investigate the thousands of patents in Sun's portfolio.⁴ [*See, e.g.*, RT 1538:24-
 24 1539:15 (Schmidt) ("Sun management was comfortable that we had done -- that what we had

25 ³ The record demonstrates that Mr. Schwartz's blog reflected the official corporate opinions of
 26 Sun Microsystems rather than merely his own personal views. *See* TX 971 (referring to "CEO
 27 blogs" as a source of Sun's "notifications" of its "material news" in its 2008 Form 10-K annual
 28 report to the SEC).

⁴ Oracle's Chief Corporate Architect, Edward Screven, testified that Sun had thousands of patents
 related to Java. RT 549:12-:14 (Screven).

1 done was free and clear of any intellectual property of Sun’s.”); TX 1128 (Rubin Dep. Tr. (July
 2 27, 2011) 14:10-:12, 14:14-15:07, 15:09-:13) (explaining that it was “not feasible to look at all
 3 the patents out there in the patent system”).] In the face of such overwhelming evidence of public
 4 support by Oracle and Sun—and the *lack* of any evidence of actual notice of the specific patents
 5 at issue prior to July 20, 2010—no reasonable jury could find that Google acted in an objectively
 6 reckless manner.

7 Moreover, following the July 20, 2010 notice of the patents-in-suit and the filing of Oracle
 8 complaint, Google developed a series of legitimate defenses to Oracle’s patent infringement
 9 allegations following its analysis of the patents-in-suit. [*See, e.g.,* Answer to Plaintiff’s
 10 Complaint Dkt. No. 32 (asserting legal defenses of non-infringement, invalidity, unenforceability,
 11 etc.).] Nothing in the record suggests that Google’s defenses were made frivolously or in bad
 12 faith. Google’s good faith assertion of legitimate defenses to Oracle’s allegations of patent
 13 infringement cannot by itself serve as a basis for finding Google a willful infringer. *Gustafson*,
 14 897 F.2d at 511; *see also Advanced Fiber Technologies (AFT) Trust v. J&L Fiber Services, Inc.*,
 15 674 F.3d 1365, 1377 (Fed. Cir. 2012) (affirming summary judgment of no willful infringement
 16 based in part on defendant’s presentation of “compelling non-infringement and invalidity
 17 arguments”); *Spine Solutions, Inc. v. Medtronic Sofamor Danek USA, Inc.*, 620 F.3d 1305, 1319
 18 (Fed. Cir. 2010) (The objective prong “tends not to be met where an accused infringer relies on a
 19 reasonable defense to a charge of infringement.”).

20 Finally, where the threshold objective prong of *Seagate* is met, “the patentee must also
 21 demonstrate that this objectively-defined risk (determined by the record developed in the
 22 infringement proceeding) was either known or so obvious that it should have been known to the
 23 accused infringer.” *Seagate*, 497 F.3d at 1371. Because Oracle failed to carry its burden of proof
 24 by clear and convincing evidence that the objective prong has been met based on the record, there
 25 can be no finding of willfulness and the Court need not consider the subjective prong. *See*
 26 *Accentra Inc. v. Staples, Inc.*, Case No. CV 07-5862 ABC (RZx), 2011 WL 7563039, *23 (C.D.
 27 Cal. Dec. 19, 2011) (citing *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1311 (Fed. Cir.
 28 2011); *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1337 (Fed. Cir.

2009)). In any event, even if Oracle had been able to meet the clear and convincing standard required by the first, objective prong, Oracle failed to introduce any evidence sufficient to meet the requirements of the second, subjective prong.

For the foregoing reasons, Google is entitled to judgment as a matter of law that Oracle has not proven that Google willfully infringed the '104 Patent or the '520 Patent.

* * *

Google's Rule 50 motion is based on Google's Motion (Dkt. 1151), Google's May 10, 2012 oral motion for judgment as a matter of law [RT 3707-09], this brief in support and the evidence and authorities cited therein, the entire trial record, and such argument as the Court allows on this Motion.

Dated: May 16, 2012

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GOOGLE INC.

ATTESTATION

I, Bruce W. Baber, am the ECF User whose ID and password are being used to file this Google's Brief In Support Of Motion For Judgment As A Matter Of Law On Counts V And VII of Oracle's Amended Complaint. In compliance with General Order 45, X.B., I hereby attest that Robert A. Van Nest has concurred in this filing.

Date: May 16, 2012

/s/ Bruce W. Baber
BRUCE W. BABER